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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/311,014	05/13/1999	MICHAEL A. HELGESON	1004.1129101	9662

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EXAMINER

SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 03/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/311,014

Applicant(s)

HELGESON, MICHAEL A.

Examiner

Philip J. Sobutka

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-30 is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1-3,6,7,9,10,12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kackman (US 5,809,013) in view of Gaucher (US 6,175,860).

Consider claims 1,2,3,6,9. Kackman teaches a building monitoring system comprising a plurality of remote units with controllers, timers and transmitters that transmit to a master unit (Kackman fig 11, col 1, lines 8-32). Kackman teaches using redundancy to attempt to ensure that messages are received at the master controller (Kackman col 1, lines 33-45). Kackman lacks a teaching of bi directional communications by equipping the master with an RF transmitter to transmit a schedule for transmission to a transceiver at the remotes. Gaucher teaches a bi-directional communications arrangement in which the master has a transmitter which transmits a schedule for transmission to a transceiver at the remote (Gaucher figs 4,5,6b, 6c,col 7, lines 48-55, col 10, lines 47-56, 61-68). Note that Gaucher's arrangement includes scheduling the remotes as a function of the type of remote (Gaucher col 8, lines 40-62, col 9, lines 37-65). Gaucher teaches that this eliminates collisions with transmissions from other devices (Gaucher col 10, lines 38-46). It would have been obvious to one of ordinary skill in the art to modify Kackman to equip the master with a transmitter and the remotes with transceivers thereby allowing the master to transmit a schedule for remote transmission in order to eliminate the possibility of collision as taught by Gaucher.

As to claims 10,12-14, the system of Kackman as modified by Gaucher would perform the claimed steps.

As to claims 7,15,16,17,18, note that Kackman as modified by Gaucher's arrangement above, would include scheduling the remotes as a function of the type of remote (Gaucher col 8, lines 40-62, col 9, lines 37-65).

2. Claims 8,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kackman in view of Gaucher and further in view of Simionescu et al (US 5,963,650).

Kackman in view of Gaucher teaches everything claimed except for the remotes having power saving states. Simionescu teaches a remote wireless data collection system in which the remotes has modes for transmit, receive and normal, power saving mode (Simionescu col 12, lines 30-65). Simionescu teaches that this allows the power consumption to be tailored to the power requirements (Simionescu col 12, lines 30-65). It would have been obvious to one of ordinary skill in the art to modify Kackman in view of Gaucher to equip the remotes with the tailored power consumption and power saving modes as taught by Simionescu in order to allow the power consumption to be tailored to the remote power requirements.

3. Claims 4,5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kackman in view of Gaucher.

Kackman in view of Gaucher teaches everything claimed except for the specific format in which the transmit times are transmitted from the master, absolute or time delay. Official Notice is taken that it is notoriously well known in the art to transmit synchronized transmission times as absolute or delay times. Therefore, it would have been obvious to one of ordinary skill in the art to modify Kackman in view of Gaucher to

transmit absolute or delay times in order to ensure that the transmissions are properly synchronized.

4. Claims 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kackman in view of Gaucher and further in view of Gemar (US 6,414,963).

Consider claims 19,23-26. Kackman in view of Gaucher teaches everything claimed except for the transmission schedule being determined using a bucket algorithm structure. Gemar teaches a transmission scheduler which creates data structures with elements based on the transmission times then filling buckets with connection identifiers (Gemar see especially col 6, lines 8-23, col 8, lines 15-60, col 17, line 65 – col 18, line 20). Gemar teaches that this scheduling method allows for dynamic rate scheduling with fine granularity, maximizing communication bandwidth (Gemar, see especially col 3, lines 40-57, col 6, lines 8-25). It would have been obvious to one of ordinary skill in the art to modify Kackman in view of Gaucher to use the bucket algorithm schedule method as taught by Gemar in order to allow for dynamic rate scheduling with fine granularity and maximize communication bandwidth.

As to claims 20-22, note that Kackman in view of Gaucher, and in view of Gemar would determine transmission schedule based on the information received from the remotes, therefore the adjustable parameters of the bucket algorithm would also be based on the remote information.

Allowable Subject Matter

5. Claims 27-30 are allowed.

Information Disclosure Statement

6. Note that the IDS statement filed 11-24-2000 is no longer in the file. The IDS and copies of the relevant prior art must be re-submitted.

Note that the response included re-submissions of the IDS and prior art submitted 8-27-00 and 10-30-2000, but not the submission of 11-24-200.

Response to Arguments

7. It is again noted that while the applicant resubmitted the IDS filled 8-27-2000, this time with copies of all cited references, the applicant re-submitted the IDS filed 10-30-2000, which was not requested. The IDS noted as having been filed 11-24-200 was not re-submitted

8. Applicant's arguments filed 12-18-2002 have been fully considered but they are not persuasive.

Applicant's argues that the modification would destroy the central teaching of Kackman, however it should be noted that it was Kackman's background sections that was primarily cited to show the environment of the instant invention, namely a wireless building monitoring system using packet communications. It is also noted that in Kackman's background Kackman discusses the disadvantages of redundant transmission schemes, and even Kackman's summary notes that the arrangement is a compromise solution. Therefore, one of ordinary skill would hardly be restrained from seeking other arrangements to ensure reception of packets. It is also noted that packet transmission systems are well known in the art of wireless communication and one of ordinary skill would be aware that Kackman was not the only arrangement available for

ensuring reception in a packet system. It should be clear from the rejection that Kackman's redundant transmission arrangement would not be needed given the combination. As to the combinations scheduled transmissions being unreasonable, it is noted that the data packet transmissions need only take several milliseconds. Clearly several dozens or even hundreds of remote transmitters could arrive at their scheduled transmissions in minutes if not seconds.

Applicant's other arguments depend on the argument directed to Kackman, which have been answered above.

Conclusion

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2683


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 703-305-4825. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Philip Sobutka

Pjs
March 6, 2003


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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